

IN THE CLAIMS:

77. (Unchanged) A device to orientate a body with respect to a surface spaced apart from said body, said device comprising:

a flexure system; and
a body coupled to said flexure system, with said flexure system adapted to position said body in a desired orientation with respect to said surface and maintain said orientation in response to a force being exerted upon said body.

78. (Unchanged) The device as recited in claim 77 wherein said flexure system includes a first flexure member defining a first axis of rotation and a second flexure member defining a second axis of rotation, with said body being coupled to said flexure system to rotate about said first and second axes in response to contact with said surface, said first axis extending transversely to said second axis, wherein movement of said body about said first axis is decoupled from movement of said body about said second axis.

79. (Unchanged) The device as recited in claim 78 wherein said first axis is spaced apart from said first flexure member and said second axis is spaced apart from said second flexure member.

80. (Unchanged) The device as recited in claim 78 wherein said first flexure member further includes a mount, a pair of spaced apart braces, a first flexure arm connected between said mount and one of said pair of

spaced-apart braces, a second flexure arm connected between said mount and one of said pair of spaced-apart braces disposed opposite to said first flexure arm, said first flexure arm includes a first rigid body wherein a first flexure joint is disposed between said mount and said first rigid body, and a second flexure joint is disposed between said first rigid body and brace, with said first and second flexure joints to provide motion to said first rigid body, said second flexure arm includes a second rigid body wherein a third flexure joint is disposed between said mount and said second rigid body and a fourth flexure joint is disposed between said second rigid body and brace, with said third and fourth flexure joints to provide motion to said second rigid body.

81. (Unchanged) The device as recited in claim 78 wherein said first flexure member further includes a mount, a pair of spaced apart braces, a first flexure arm connected between said mount and one of said pair of spaced-apart braces, a second flexure arm connected between said mount and one of said pair of spaced-apart braces disposed opposite to said first flexure arm, said first flexure arm includes a first flexure region disposed between said mount and brace, wherein said first flexure region further includes two flexure joints and a first rigid body, said second flexure arm includes a second flexure region disposed between said mount and brace, wherein said second flexure region further includes two flexure joints and a second rigid body.

82. (Unchanged) The device as recited in claim 78 wherein said first flexure member is coupled to said second flexure member.

83. (Unchanged) The device as recited in claim 78 wherein said flexure system comprises eight distinct joints, said joints spaced apart from a pivot point defined by intersection of said first axis and said second axis.

84. (Unchanged) The device as recited in claim 83 wherein said flexure system includes four bar-linkages coupled together to pivot about said pivot point.

85. (Unchanged) The device as recited in claim 80 wherein said mount comprises a through-hole for penetration of a curing light.

86. (Unchanged) The device as recited in claim 77 wherein said flexure system further comprises a plurality of piezo actuators attached to apply a force to rotate said body.

87. (Unchanged) A system to define a relative orientation between a body and a substrate spaced apart from said body, said system comprising:

a flexure system defining first and second axes of rotation, with said body being coupled to said flexure system to rotate about said first and second axes in response to contact with a fluid material compressed between said body and said substrate, said first axis extending transversely to said second axis.

88. (Amended) The devicee system as recited in claim 87 wherein said flexure system includes a first flexure member and a second flexure member, with said body being coupled to said flexure system to rotate about said first and second axes in response to contact with said surface, said first axis extending transversely to said second axis, wherein movement of said body about said first axis is decoupled from movement of said body about said second axis.

89. (Amended) The devicee system as recited in claim 88 wherein said first axis is spaced apart from said first flexure member and said second axis is spaced apart from said second flexure member.

90. (Amended) The devicee system as recited in claim 88 wherein said first flexure member further includes a mount, a pair of spaced apart braces, a first flexure arm connected between said mount and one of said pair of spaced-apart braces, a second flexure arm connected between said mount and one of said pair of spaced-apart braces disposed opposite to said first flexure arm, said first flexure arm includes a first rigid body wherein a first flexure joint is disposed between said mount and said first rigid body, and a second flexure joint is disposed between said first rigid body and brace, with said first and second flexure joints to provide motion to said first rigid body, said second flexure arm includes a second rigid body wherein a third flexure joint is disposed between said mount and said second rigid body and a fourth flexure joint is disposed between said second rigid body and brace, with

said third and fourth flexure joints to provide motion to said second rigid body.

91. (Amended) The device system as recited in claim 88 wherein said first flexure member further includes a mount, a pair of spaced apart braces, a first flexure arm connected between said mount and one of said pair of spaced-apart braces, a second flexure arm connected between said mount and one of said pair of spaced-apart braces disposed opposite to said first flexure arm, said first flexure arm includes a first flexure region disposed between said mount and brace, wherein said first flexure region further includes two flexure joints and a first rigid body, said second flexure arm includes a second flexure region disposed between said mount and brace, wherein said second flexure region further includes two flexure joints and a second rigid body.

92. (Amended) The device system as recited in claim 88 wherein said first flexure member is coupled to said second flexure member.

93. (Unchanged) The system as recited in claim 87 wherein said flexure system comprises eight distinct joints, said joints spaced apart from a pivot point defined by intersection of said first axis and said second axis.

94. (Amended) The device system as recited in claim 93 wherein said flexure system includes four bar-linkages coupled together to pivot about said single point.

95. (Unchanged) The system as recited in claim 90 wherein said mount comprises a through-hole for penetration of a curing light.

96. (Amended) The device system as recited in claim 87 wherein said flexure system further comprises a plurality of piezo actuators attached to apply a force to rotate said body.

97. (Unchanged) A device to orientate a body with respect to a surface spaced apart from said body, said device comprising:

a flexure system, said flexure system comprising a first flexure member and a second flexure member; and

a body coupled to said flexure system, with said flexure system adapted to position said body in a desired orientation with respect to said surface and maintain said orientation in response to a force being exerted upon said body by a fluid material compressed between said body and said surface.

98. (Amended) The system device as recited in claim 97 wherein said first flexure member and said second flexure member further comprises:

a mount;

a pair of spaced apart braces;

a first flexure arm connected between said mount and one of said pair of spaced-apart braces, said first flexure arm includes a first rigid body wherein a first flexure joint is disposed between said mount and said first rigid body, and a second flexure joint is disposed between said first rigid body and said brace; and

a second flexure arm connected between said mount and one of said pair of spaced-apart braces disposed opposite to said first flexure arm, said second flexure arm includes a second rigid body wherein a third flexure joint is disposed between said mount and said second rigid body and a fourth flexure joint is disposed between said second rigid body and said brace.

99. (Amended) The system device as recited in claim 97 wherein said first flexure member defines a first axis of rotation and said second flexure member defines a second axis of rotation, with said body being coupled to said first flexure member and said second flexure member to rotate about said first and second axes in response to contact with said surface, said first axis extending transversely to said second axis, wherein said movement of said body about said first axis is decoupled from movement of said body about said second axis.

100. (Amended) The system device as recited in claim 99 wherein said first axis is spaced apart from said first flexure member and said second axis is spaced apart from said second flexure member.

101. (Amended) The system device as recited in claim 97 wherein said first flexure member and said second flexure member comprises eight distinct joints, said joints spaced apart from a pivot point defined by intersection of said first axis and said second axis.